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## **THE CULTURE BEHIND INFRASTRUCTURE: REFLECTIONS ON NEARLY A DECADE OF RESEARCH INTO CYCLING CULTURE AND POLICY IN THE UK**

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**Abstract:** Dr Aldred was invited to contribute this piece after she was awarded the 2016 ESRC Prize for Outstanding Impact in Public Policy. It provides an introduction to her research, which explores the cultural and ethical dimensions behind cycling infrastructure and policy to understand why so many places have failed to increase cycling, and what can be done to change this. The first part of the essay discusses her research into the interrelationship between culture and infrastructure, including the introduction of the concept of ‘near misses’ into transport policy thinking. The second part discusses equity issues with cycling, and the problem of communities – such as disabled or low-income cyclists – who often do not have their needs considered. The final part looks at what is measured to inform policy. Dr Aldred recently helped develop the ‘Propensity to Cycle Tool’, funded by the Department for Transport, based on the idea that cycling potential is really what we need to know about for strategic planning – not current (low and skewed) cycling levels. Other impacts of her work have included prompting the development of cycle design guidance used in London and elsewhere in England, shaping the creation of London’s cycle superhighways, and influencing cycling infrastructure development to make it more child-friendly, such as in Waltham Forest’s ‘mini-Holland’ scheme.

**Keywords:** sustainable transport, cycling cultures, behaviour change, near misses.

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## 1. Cycling and culture

For the best part of the last decade, I've kept returning to one overarching question: why – despite policy promises – have so many places failed to increase cycling, and what can we do to change that?

Seems like a simple question. But it's taken me into some interesting and challenging places, from my sociological background in qualitative interviewing and discourse analysis, to adventures with mapping and modelling, and a reacquaintance with statistics.

It's led to me changing my mind on some things. When I started researching cycling, back in 2008, I wanted to correct what I saw as an over-emphasis on infrastructure. I wanted to look at places that had relatively high cycling levels, and figure out what could be learnt from them: hence, the ESRC-funded Cycling Cultures project with its four case study areas (Aldred, 2012; Aldred & Jungnickel, 2014). I thought culture was part of the problem and part of the solution.

It was, although not quite in the way I initially thought.

Looking at the four case study areas – Bristol, Cambridge, Hackney and Hull – I was surprised by the extent to which discourses of marginalisation still shaped cycling experiences.

Even in Cambridge, where cycling is numerically normal, there are still identity threats.

Cyclists in the UK are often seen as by definition incompetent road users, slowing down drivers or threatening pedestrians – always in the way. Yet wearing the 'cycling uniform' of helmet and high-vis doesn't help, because then you become 'too competent'; Lycra Lout or MAMIL (Middle-Aged Man in Lycra).

So culture remained a problem, even in case study areas. And while interviewees narrated cycling as part of local identity, these discourses remained specific - whether cast more in terms of localised traditions (Cambridge, Hull) or emerging social trends specific to a locality (Bristol, Hackney).

Local cycling culture helped people who cycle defend themselves against the broader national context, but it was often an uphill struggle against repeated threats. Too often, cycling remained physically and psychically uncomfortable.

Leading the Cycling Cultures project, rather than encouraging me to pit culture against infrastructure, helped me see how they inter-relate. I became fascinated by the way in which cycling environments and infrastructure, cycling cultures, and attitudes towards cycling reinforced each other.

My later Near Miss Project (Aldred & Croweller, 2015; Aldred, 2016), funded by AHRC/Blaze, has highlighted the role of Britain's toxic road culture. A 'must-get-in-front' attitude on the roads particularly threatens cyclists, who unlike pedestrians rarely have their own space away from drivers. I found that a regular commuting cyclist in the UK might expect to have one very scary incident per week; leading to an embattled attitude among many ("To stay alive one must anticipate that all others will be careless" in one participant's words).

The sense of driver entitlement helps make the roads a scary place for cyclists, but also helps support recurrent hostility towards building cycling infrastructure – particularly when (as it often must in congested urban locations) it involves reallocation of space away from private motor vehicles.

## **2. Equity and cycling**

Connections between culture and infrastructure have recently been powerfully articulated by campaign group Wheels for Wellbeing, which has highlighted how (bad) cycling infrastructure embodies assumptions about who cycles, and who doesn't.

Take the UK's notorious 'Cyclists Dismount' sign. As with barriers forcing the issue, it's a frequent visitor to bike routes. While frustrating for most, it's an absolute barrier for anyone who can't get off and walk their cycle. It reflects and re-creates the assumption that no one who cycles can possibly have trouble walking; that cycling is discretionary and not, for instance, a needed mobility aid.

Talking to Dr. Kay Inckle for a film I'm making with Wheels for Wellbeing (Wheels for Wellbeing, n.d.), she expressed eloquently the way in which disabled people are defined as immobile; hence by definition incapable of being active mobile citizens. The different ways in which disabled people and cyclists are stereotyped and stigmatised together render disabled cyclists invisible – and help reproduce conditions making it very hard for the majority of us to cycle.

Wheels for Wellbeing, with other advocates and policy-makers, have helped me understand issues around cycling that I wouldn't necessarily have grasped alone. For instance, being in touch with practitioners from the USA has helped me think more about equity issues.

Protected bike lanes are important for everyone, and particularly so for under-represented groups. However, building more protected lanes is necessary but not sufficient. Concerns around safety from crime, the cost of adapted cycles, and police harassment may also be important barriers for people from different communities, yet are rarely considered.

Moreover, the question of where we build the bike lanes matters too. Are bike lanes reaching disadvantaged communities? Are they serving journeys not just to work, but also to school and

the shops? This is an equity issue too, because where people live and work, the types of trips they make, varies by demographic group.

Too often though, some cyclists remain invisible, and their needs not considered. This is the case for disabled cyclists, but also for lower-income cyclists. A ‘cycling as middle-class’ theme has become prominent recently; yet analysis of the Active People Survey (under peer review) shows that within local authority areas, there is little social gradient in utility cycling. ‘Cycling is middle-class’ does dual work. It helps both to stigmatise cycling infrastructure as gentrifying, and to erase the experiences of lower-income cyclists (which may differ from middle-class cycling experiences).

### **3. Policy and practice**

Developing my research ideas, I increasingly became interested in policy cultures, and how these relate to cultures of cycling (or not-cycling). It seemed to me that policy discourses, practices, tools, models, and imagery are crucial in reproducing existing marginalisations and inequalities.

What do we measure? Usually what we (or what those in charge of policy, at least) think is important. And in the context of historically car-dominated priorities and squeezed funding, not having the numbers can be a decisive barrier to cycling investment.

For cycling, there’s long been a lack of data, models, and tools – leading to a vicious circle. Low levels of cycling, low priority given to cycling, no data on cycling, no modelling inputs, no consideration of cycling within traffic schemes... In response, one collaborative paper in press uses modelling to explore the extent to which cyclists in shared bus lanes might delay buses. This is an issue that has been traditionally ignored, for a range of reasons: one being that modelling software was developed to model cars and is rarely used to model cyclists (even though at least in some packages, parameters can be manipulated to approximate cyclist behaviour).

Another project I’ve been involved in, the DfT-funded Propensity to Cycle Tool (PCT) (Propensity to Cycle Tool, n.d.; Lovelace et al., 2017), addresses by calculating, mapping, and visualising cycling potential. This is a challenging ask given that we have often poor data on existing cycling levels, let alone cycling potential (where trips currently made by other modes might most easily be switched to cycling). However, cycling potential is really what we need to know about for strategic planning – not current (low and skewed) cycling levels.

Transport for London have developed a related Cycling Potential Analysis (also covering walking) (Transport for London, 2017). TfL’s analysis uses additional London datasets to create a model that’s in some respects more sophisticated. It sits alongside their Cynemon model, the first in the UK to model cycling flows across a city, and route them to the network.

Thanks to being involved in the PCT, I've learnt how to use GIS software – and increasingly it seems like some particularly interesting problems (like analysing injury in relation to exposure) demand the use of geographical data. Some of my most recent projects build on this; including using Cynemon and a range of other geographical datasets (e.g. Strava Metro).

It's exciting to see policy-makers developing and/or using new data sources, tools and models. Dealing with urgent policy problems (we can never fit 2 million more people into London if they bring cars with them) TfL analysts have responded with cutting-edge research. London also offers the ability to conduct academic evaluation of large-scale active travel interventions, and I'm working on this too.

The paper should be referenced as follows:

Aldred, R. (2017). 'The culture behind infrastructure: reflections on nearly a decade of research into cycling culture and policy in the UK', in Joss, S. (ed.), *International Eco-Cities Initiative Reflections Series*, Issue 21. University of Westminster. Online: <https://www.westminster.ac.uk/eco-cities/reflections>

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